

Claims.

1. Overspeed safety device for a pneumatic rotation motor with a stator (10) with an air inlet passage (16), a rotor (12) comprising a speed responsive actuator (34) connected to the rotor (12) for co-rotation therewith, and a valve (33) shiftable by said actuator (34) from an open position to a closed position, wherein said actuator (34) comprises a contact element (48) which is radially movable by centrifugal action between an inactive position and an active position, and a spring means (46) arranged to maintain said contact element (48) in said inactive position at motor speed levels below a predetermined maximum speed level and to permit said contact element (48) to be displaced radially to said active position at motor speed levels above said maximum speed level to thereby accomplish shifting of said valve (33) from said open position to said closed position, characterized in that said valve (33) comprises a disc-shaped valve element (36) which is rotatable about a pivot axis (37) for movement between said open position and said closed position, wherein said valve element (36) in said open position is located substantially in parallel with the inlet passage (16), and in said closed position said valve element (36) is located transversely to the inlet passage (16), said pivot axis (37) extends transversely to the inlet passage (16) and is located in a laterally off-set position in relation to the rotation axis of the rotor (12) in such a way that said valve element (36) in said open position is out of reach by said contact element (48) when said contact element (48) occupies said inactive position, whereas said contact element (48) in said active position reaches out radially to hit said valve element (36) making the latter shift from said open position to said closed position, and a retaining means (42) for releasably holding said valve element (36) in said open position.

2. Overspeed safety device according to claim 1, wherein said valve element (36) is made of a ferrous material, and said retaining means comprises a first magnet (42) which is mounted in the inlet passage (16) and arranged to attract and hold said valve element (36) in said open position, and a second magnet (43) is arranged to attract and hold said valve element (36) in said closed position.

3. Overspeed safety device according to claim 1 or 2, wherein the inlet passage (16) is formed with an axially facing valve seat surface (41) disposed substantially transverse to the inlet passage (16) and arranged to be engaged by said valve element (36) in said closed position.

4. Overspeed safety device according to anyone of claims 1-3, wherein said spring (46) is formed by a substantially straight rod connected to the rotor (12) in a concentric disposition and having a free end carrying said contact element (48).

5. Overspeed safety device according to claim 3, wherein said valve seat surface (41) is part-circular.